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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,652	12/08/1999	ERIC ANDREW BEARD	LE9-99-111	6735

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EXAMINER
ROBINSON, MYLES D

ART UNIT	PAPER NUMBER
2625	

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12/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/456,652	<b>Applicant(s)</b> BEARD ET AL.	
	<b>Examiner</b> Myles D. Robinson	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 9, 16 - 31 and 38 - 41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 9, 16 - 31 and 38 - 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment was received on 7/2/2007, and has been entered and made of record. Currently, **claims 1 – 9, 16 – 31 and 38 – 41** are pending.

### *Response to Arguments*

2. Applicant's arguments with respect to **claims 1 – 9, 16 – 31 and 38 – 41** have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Objections*

3. The following quotation of 37 CFR 1.75(a) is the basis of the objection:
  - (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.
4. **Claims 16 – 31** are objected to under 37 CFR 1.75(a) as failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention or discovery.

**Claim 16** recites the limitation "a receiving device" in line 13 of the claim after the limitation "one or more receiving devices" was claimed in line 11 of the claim. The applicant has failed to particularly point out and distinctly claim if the applicant is referring to **the same, instant** "one or more receiving devices" or **a unique and distinctly different** "one or more receiving devices" within the claim. All claims dependent upon this claim suffer the same deficiency and, therefore, are objected to as well.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. ***Claims 1 – 9, 16 – 31 and 38 – 41*** are rejected under 35 U.S.C. 102(e) as being anticipated by **Buckley et al.** (U.S. Patent No. 6,798,530).

Referring to **claim 23**, Buckley discloses a system for providing a communication interface (see *Fig. 2, print server 200 [column 4, lines 15 – 18, column 5, lines 33 – 36, 57 – 58 and column 7, lines 21 – 34]*) between a plurality of devices (see *Fig. 2 wherein print server 200 is in between meta-printers 300, 301 and general purpose computer 100*), said system comprising:

a transmitting device (see *Fig. 2, general purpose computer 100 [column 7, lines 21 – 34]*) having a first data store (see *Fig. 2, memory 130 [column 6, lines 10 – 22]*), said transmitting device having two or more parameters associated therewith (see *Fig. 2 wherein memory 130 comprises application memory portion 136 such that these application program(s) associated with that particular client computer can only be operated within computer 100 and are incompatible as well as non-operational within meta-printers 300, 301 [column 6, lines 26 – 31 and column 7, lines 9 – 14]* and see *Figs. 1 and 3 – 6 wherein the systems and methods of generating graphical user interface(s) of computer 100, which are displayed on display device 160, are based upon the available printer drivers as well as the type of computer implementing the*

*display of the graphical interface(s) [column 5, lines 24 – 31, column 6, line 63 – column 7, line 3 and column 9, lines 37 – 53] such that generated GUIs and application programs are parameters of the transmitting computer),*

*at least one receiving device (see Fig. 2 wherein meta-printers 300, 301 inherently comprise memory storage [i.e. ROM, RAM, etc.] [column 6, lines 1 – 9 and column 7, lines 21 – 34]) having a second data store, said receiving device having two or more parameters associated therewith (see Fig. 3 wherein parameters of the printer include paper sizes availability, graphic resolution and document rendering options of the virtual meta-printers [column 4, lines 9 – 55, column 7, lines 41 – 48 and column 7, line 52 – column 8, line 6]),*

*wherein said transmitting device transmits a data stream from said first data store to said second data store of said receiving device (see Fig. 2, links 210, 220, 222 [column 5, lines 37 – 49]), said data stream including at least one metavariable, said metavariable being indicative of the two or more parameters of either said transmitting device or said receiving device (column 6, line 63 – column 7, line 20 wherein the user-printer driver is to output the appropriate signals [i.e. the at least one metavariable] to the currently selected meta-printer to cause that currently selected meta-printer to render the opened document once the user has selected the particular virtual printer(s) to be used),*

*wherein at least one of the parameters defines one or more rendering characteristics to be applied to a print job (see Fig. 3, document rendering options 440, halftone color adjustment rendering parameter 442 [column 7, lines 46 – 48], see Fig. 4*

*wherein document rendering parameter options portion 500 corresponds to document options portion 440 in Fig. 4 [column 7, line 49 - column 8, line 6] and see Fig. 5, document rendering parameter options selection portion 600 [column 8, lines 24 – 60]), and wherein the metavariable is treated as a single variable containing data cumulative of variables for each parameter (column 4, lines 9 – 55 and column 4, line 63 – column 5, line 12 wherein each of the virtual printers define a different set of selected rendering parameter options and may even define more than one such set of selected rendering parameter options such that it allows the user to easily select a particular set of one or more virtual printers without continually accessing the manual GUI), and wherein said metavariable is defined by a metavariable table (see Fig. 2 wherein printer driver memory 134 stores a selection of printer drivers that allows access to multiple virtual printers stored within printer definition memory portion 132 which contain various virtual printer definitions 430 [see Fig. 3] for a single meta-printer [column 6, lines 34 – 50, column 7, lines 4 – 20 and column 7, lines 41 – 48] such that memory 130 contains a look-up sub-table of virtual printer definitions comprised within a look-up table of printer drivers) including at least one metavariable setting (see Figs. 4 – 5, halftone settings portion 510, color settings portion 520, gamut settings 530) and two or more variable settings corresponding to each said at least one metavariable setting (see Figs. 4 – 5 wherein portions 512 – 516 are a subset of settings corresponding to halftone settings portion 510, portions 522 – 528 are a subset of settings corresponding to color settings portion 520 and portions 532 – 538 are a subset of settings corresponding to gamut settings 530 such that these subsets are analogous to two or more variable settings*

*corresponding to each of the metavariable settings [column 7, line 49 – column 8, line 6)], and*

wherein at least one of the transmitting device and the receiving device include a variable manager (see Fig. 2, processor 120) configured to process variables including the metavariable (column 7, lines 4 – 20).

Referring to **claim 24**, Buckley discloses the system further wherein said metavariable is data indicative of two or more configurations and settings of the transmitting device (see Fig. 2 wherein memory 130 comprises application memory portion 136 such that these application programs associated with that particular client computer can only be operated within computer 100 and are incompatible as well as non-operational within meta-printers 300, 301 and are communicated to printer driver memory portion 134 [column 6, lines 26 – 31 and column 7, lines 9 – 14] and see Figs. 1 and 3 – 6 wherein the systems and methods of generating graphical user interfaces of computer 100, which are displayed on display device 160, are based upon the available printer drivers as well as the type of computer implementing the display of the graphical interface [column 5, lines 24 – 31, column 6, line 63 – column 7, line 3 and column 9, lines 37 – 53] such that the appropriate transmitted signals include the type of application program used by the selected document as well as the selected printer driver is one factor, in conjunction with the type of computer generating the GUI display, upon which determines the generation of the graphical user interface).

Referring to **claim 25**, Buckley discloses the system further wherein said metavariable is data indicative of two or more configurations and settings of the receiving device (*see Fig. 3, virtual printer definition 430 [column 7, lines 41 – 48]*).

Referring to **claim 26**, Buckley discloses the system further wherein said metavariable is a command altering two or more settings of the receiving device upon receipt of said metavariable by the receiving device (*see Figs. 3 – 5 wherein graphical user interfaces receive user input to determine the virtual printer(s) to render the document [column 5, lines 24 – 31, column 6, line 63 – column 7, line 3, column 7, line 35 - column 8, line 6 and column 8, line 24 – 37]*).

Referring to **claim 27**, Buckley discloses the system further wherein said metavariable is data indicative of two or more application settings of the transmitting device (*see Fig. 2 wherein application memory portion 136 includes currently executing programs [e.g. Internet, document browsers, word processing programs, graphics programs, etc.] used to open new files, to store files and to send files [column 6, lines 26 – 31] wherein currently executing programs is indicative of two or more applications of the transmitting computer*).

Referring to **claim 28**, Buckley discloses the system further wherein said metavariable is data indicative of two or more application settings of the receiving device (*see Figs. 4 – 5 wherein DocuPrintC55 gamut emulation option 537 and DocuPrint6J gamut emulation option 538 are analogous to application settings associated with the printer which are separate and distinct from generic gamut*



*rendering options 532, 534 as well as from one another [column 7, line 64 – column 8, line 6]).*

Referring to **claim 29**, Buckley discloses the system further wherein one of said transmitting device and said receiving device is a host computer (*see Fig. 2, general purpose computer 100, print server 200*), and the other of said transmitting device and said receiving device is a printer (*see Fig. 2, printers 300, 310*).

Referring to **claim 30**, Buckley discloses the system further wherein said metavariable is a command from a transmitting host computer to a receiving printer, said metavariable changing two or more settings of the printer (*see Figs. 3 – 5 wherein graphical user interfaces receive user input to determine the virtual printer(s) to render the document [column 5, lines 24 – 31, column 6, line 63 – column 7, line 3, column 7, line 35 - column 8, line 6 and column 8, line 24 – 37]).*

Referring to **claim 31**, Buckley discloses the system further wherein said metavariable is data indicative of the printer settings, said metavariable transmitter by a transmitting printer to one or more receiving host computers (*column 6, line 63 - column 7, line 3, column 7, lines 21 – 34, column 9, line 66 – column 10, line 3 and column 10, lines 11 – 15 wherein printers 300, 310 are responsible for returning the available rendering options of that particular printer for generating graphical user interfaces, which are shown in Figs. 1 and 3 – 6, in a transmission to the print server 200 and/or general computer 100*).

Referring to **claims 1 – 6**, the rationale provided in the rejections of claims 23 – 28 respectively, are incorporated herein. In addition, the systems of claims 23 – 28 include the limitations and elements of the interfaces of claims 1 – 6, respectively.

Referring to **claim 7**, Buckley discloses the interface further wherein said interface is between one or more computers and one or more printers (*see Fig. 2 wherein print server 200 is in between meta-printers 300, 301 and general purpose computer 100 [column 4, lines 15 – 18, column 5, lines 33 – 36, 57 – 58 and column 7, lines 21 – 34]*), each computer and each printer having a data store (*see Fig. 2, general purpose computer 100 comprising memory 130 [column 6, lines 10 – 22 and column 7, lines 21 – 34] and see Fig. 2 wherein meta-printers 300, 301 inherently comprise memory storage [i.e. ROM, RAM, etc.] [column 6, lines 1 – 9 and column 7, lines 21 – 34]*).

Referring to **claim 8**, the rationale provided in the rejection of claim 4 is incorporated herein. In addition, the interface of claim 4 includes the limitations and elements of the interface of claim 8.

Referring to **claim 9**, the rationale provided in the rejection of claim 31 is incorporated herein. In addition, the system of claim 31 includes the limitations and elements of the interface of claim 9.

Referring to **claims 16, 21 and 22**, the rationale provided in the rejections of claims 23, 26 and 24, respectively, are incorporated herein. In addition, the systems of claims 23, 26 and 24 perform the methods of claims 16, 21 and 22, respectively.

Referring to **claims 17 and 18**, the rationale provided in the rejection of claim 31 is incorporated herein. In addition, the system of claim 31 performs the methods of claims 17 and 18 combined.

Referring to **claims 19 and 20**, Buckley discloses the method further wherein the steps of generating the metavariable in a the transmitting device and transmitting the metavariable are generating the metavariable in a host computer (see *Fig. 2, general purpose computer 100 [column 7, lines 21 – 34]*) and transmitting the metavariable from the host computer (*column 6, line 63 – column 7, line 20 wherein the user-printer driver is to output the appropriate signals [i.e. the at least one metavariable] to the currently selected meta-printer to cause that currently selected meta-printer to render the opened document once the user has selected the particular virtual printer(s) to be used*),

wherein the steps of receiving the metavariable at the receiving device and processing the metavariable are receiving and processing the metavariable at a printer device (see *Fig. 2, meta-printers 300, 301 [column 6, lines 1 – 9 and column 7, lines 14 – 34]*).

Referring to **claims 38 and 41**, the rationale provided in the rejections of claims 23 and 26, respectively, are incorporated herein. In addition, the systems of claims 23 and 26 include the limitations and elements of the interfaces of claims 38 and 41, respectively.

Referring to **claim 39**, the rationale provided in the rejections of claims 24 and 25 are incorporated herein. In addition, the systems of claim 24 and 25 include the limitations and elements of the interface of claim 39.

Referring to **claim 40**, the rationale provided in the rejections of claims 27 and 28 are incorporated herein. In addition, the systems of claim 27 and 28 include the limitations and elements of the interface of claim 40.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Diab** (US Patent No. 7,266,565) discloses a table-oriented application development environment wherein metadata are organized in a tabular fashion (see *Abstract and Fig. 1*).

**Diab** (US Patent No. 7,130,863) discloses a method for enhancing object-oriented programming through extending metadata associated with class-body class-head by adding additional metadata to the database (see *Abstract*).

**Ferlitsch** (US Patent No. 7,256,901) discloses a printer driver customization using an incremental custom print processor that calls subroutines for custom printer features and non-traditional actions, which are not specified within a PPD and are different than those traditional actions found in the operating system's default print processor, and wherein the print data is captured within a metafile (e.g. Extended Metafile) (see *Abstract and Figs. 1 – 4*).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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09/456,652  
Art Unit: 2625

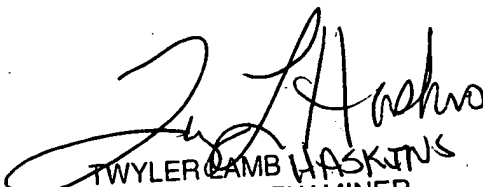
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MDR

12/19/07



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